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ABSTRACT

Presented is a listing of books recommended by the Mathematical Association of the United Kingdom that deal with practical and constructional teaching activities. The following information on each book is provided: author: title: publisher: cost to the nearest pound: categories of use: and a code that indicates if the book in question is out of print, reprinted, and/or highly recommended. Brief annotations are provided with many of the entries. (MP)

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BOOKLISTS

For the Teaching of Mathematics
in Schools

PRACTICAL and CONSTRUCTIONAL ACTIVITIES

(REF: P&C)

prepared by a sub-committee
of the Teaching Committee
of the
Mathematical Association

THE MATHEMATICAL ASSOCIATION

May 1980

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Information on each book is displayed in the following format:

Author	Title		
Publisher	Cost	Categories of use	Code
Annotation			

Cost Given to the nearest f above.

Code Symbols

- * Highly recommended.
- O Out of Print.
- R Reprinting.

Categories of use

- A Applications - to science, geography, economics.....
- B Background and reference books for teachers.
- C Content - mathematical topics (not above 1st year University level).
- E Mathematical Education - eg. for 'Diploma' students.
- J/K Primary school teachers (4-11 yrs)/and pupils.
- L/M Lower secondary school teachers (11-16)/and pupils.
- P/Q Practical and constructional work, books for teachers/pupils.
- T Teaching method.
- U/V Sixth-form teachers/and pupils.
- Z Puzzles, problems, games and recreational mathematics.

Details of lists available are shown outside back cover.

PREFACE

The lists have been prepared by a sub-committee of Teaching Committee, and edited by F.R. Watson. A data-processing program written by Dr. K.H. Bennett (University of Keele) was used to extract the sublists and print them alphabetically.

Very many people have contributed to the production of these lists, in a variety of ways. In particular, thanks are due to the staff of the Education Library and of the Computer Centre, University of Keele, and to the members of the sub-committee, and many others who supplied information and comments.

It is intended to up-date the lists at fairly frequent intervals. We cannot hope to have avoided all errors and your suggestions are invited; they will help to improve the lists.

Comments on the lists, or notification of errors and omissions will be welcomed. Please address correspondence to the Secretary, Booklists Sub-committee, c/o Mathematical Association, 259 London Road, Leicester.

F.R.W.

May 1980

ATH	MATHEMATICAL ACTIVITIES FROM POLAND	1	EJKPQT	
ATH, MARKET ST. CHAMBERS, NELSON, LANCS,				
BB9 7LN				
(A PRIMARY PAMPHLET)				
+				
BAKER, L., WELLS, STEPHENS,	CHILDSPLAY MATHEMATICS			
FIELKER				
EVANS, 1975.		2	PQJBEZT	*
(GAMES, OPEN SITUATIONS)				
+				
BAWELL, C. AND OTHERS	STARTING POINTS FOR TEACHING MATHS IN MIDDLE AND SECONDARY SCHOOLS.			
OUP, 1972.			EJLMPQTUVZ	*0
(MIS 1,7 IDEAS FOR INVESTIGATIONS, LOWER SECONDARY)				
+				
BARATTA-LORTON, M.	MATHEMATICS THEIR WAY			
ADDISON WESLEY, 1976		10	JQ	
(SUGGESTIONS FOR PRACTICAL INFANT ACTIVITIES IN NUMBER AND MEASURE)				
+				
BARATTA-LORTON, M.	WORK JOBS			
ADDISON WESLEY, 1972			JQ	
(SUGGESTIONS FOR PRACTICAL INFANT ACTIVITIES IN NUMBER AND MEASURE)				
+				
BARR, S.	EXPERIMENTS IN TOPOLOGY.			
MURRAY, 1965.			BLMPUVQ	*0
(PRACTICAL ACTIVITY AND FASCINATING DIALOGUE)				
+				
BEARD, R. S.	PATTERNS IN SPACE.			
CREATIVE PUBLICATIONS INC.			LPU	
(BOX 10328, PALO ALTO, CALIFORNIA,				
94303, USA.				
(GEOMETRIC DESIGNS & CONSTRUCTIONS, PP.237)				
+				
BELL, D. ET AL	AREA, WEIGHT & VOLUME			
NELSON, 1975		4	EJPT	
+				
BELL, HUGHES AND ROGERS	AREA, WEIGHT AND VOLUME			
NELSON, 1975		3	PJBET	
(MONITORING AND ENCOURAGING CHILDREN'S CONCEPTUAL DEVELOPMENT)				
+				
CAMERON, A.J.	MATHEMATICAL ENTERPRISES FOR SCHOOLS.			
PERGAMON, 1966.			BJMPQ	
+				
CHIVERS, K.G. AND ROSEWELL,	MATHEMATICAL EXPERIMENTS FOR JUNIORS. BOOKS 1,2			
G.N.W.				
CASSELL, 1965.			KPQ	0
(MIS 1,1)				
+				

- COLE, J.P. AND BEYRON, N.J. NEW WAYS IN GEOGRAPHY (3 VOLS)
BASIL BLACKWELL 1, P QJ K L M *
- + (MIS 6,1 SIMPLE PRACTICAL MATHEMATICS EXERCISES, PP61,64,64) 1,1
- CRITCHLOW, K. ORDER IN SPACE (GEOMETRY). J L P U V M *
- + THAMES & HUDSON, 1969 (PRACTICAL VISUAL EXERCISES)
- CUNDY, H.M. & ROLLET, A.P. MATHEMATICAL MODELS. 3 B J L M P Q U V *
- + OXFORD, 2ND EDN., 1973 (G358, MIS 2,3, CLASSIC TREATMENT OF MODELS AND MODEL-MAKING, PP. 286)
- DALTON, R. ET AL NETWORKS IN GEOGRAPHY. A L M P Q U V
- + G. PHILIP, 1973
- GRICE, M. ONE, TWO, THREE, FOUR : NUMBER RHYMES & FINGER GAMES 3 J P Z
- + FREDERICK WARNE 1972
- GRUENBERGER, F. AND JAFFRAY, G. PROBLEMS FOR COMPUTER SOLUTION. M Q V Z
- + WILEY, 1965. (PROBABLY BEST SUCH COLLECTION)
- HOLLANDS, R. MATHS GAMES & ACTIVITIES 2 J P T
- + HART-DAVIS, 2ND EDN. 1977
- HOLT, M. AND DIENES, Z. LET'S PLAY MATHS. E J P T 0
- + PENGUIN, 1973. (MIS 4,2, IDEAS FOR 70 GAMES WITH CHILDREN 4-11 YRS)
- HOPKINS, C.H. PROJECT MATHS, STAGES 1,2,3. L M Q
- + LONGMANS, 1966
- HORNE, S. PATTERNS AND PUZZLES IN MATHEMATICS Z Q
- + RAND McNALLY, (FRANKLIN PUBLICATIONS), 1970. (COLLECTION OF PUZZLES AND GAMES, MANY ARE GEOMETRIC, 96PP.)
- KRAUSE, E.F. TAXICAB GEOMETRY. 3 L M P Q U V
- + ADDISON-MESLEY, 1975. (MIS 5,2, SIMPLE BUT TEACHES SOME PROFOUND BASIC GEOMETRICAL IDEAS)

- KRULIK, S. HANDBOOK OF AIDS FOR TEACHING JUNIOR-SENIOR HIGH SCHOOL MATHEMATICS
W. B. SAUNDERS CO. 1971, (PHILADELPHIA U.S.A.) LPQU
+ (HANDBOOK OF 41 MULTI SENSORY AIDS, PP.120)
- LEAPFROGS GROUP CALCULATORS; FITTING; SYSTEMS (3 VOLS)
LEAPFROGS, GOLD HURDUR, NEWTON ST. CYRES, 1,1 KMQ *
EXETER, DEVON
+ (LEAPFROGS GROUP ALSO PRODUCES: POSTERS, FILMS, SLIDES, CASSETTES & MATERIALS; SEE CATALOGUE)
- LEAPFROGS GROUP (NETWORK WORKBOOKS: WITH FEW WORDS (BLUE, ORANGE, GREEN, BLACK) 4 VOLS.
SERIES) HUTCHINSON, 1976 1,1 MQ
+ (PUZZLES AND DIAGRAMS INVITING THE USER TO ADD OWN IDEAS - VISUAL RATHER THAN ERBAL)
- LEAPFROGS GROUP (NETWORK LINK BOOKS (LINKS, LEADS, LEAVES) 3 VOLS
SERIES) HUTCHINSON 1976 1,1 KMQ
+ (PHOTOGRAPHS, DRAWINGS ETC. WITH IMPLICIT MATHEMATICAL THEMES - FEW CAPTIONS, LEAVES IS A "FLICKER BOOK")
- LEAPFROGS GROUP (NETWORK ACTION BOOKLETS: 14 TITLES
SERIES) HUTCHINSON, 1977 1,1 KMQ *
+ (TITLES ARE : ANIMATIONS, BANDS, CHANCE, CODES, CUBES, DOODLES, DOTS, FOLDS, MOVES, ORDERS, PEGBOARDS, PRINTS, SPIRALS, TILES)
- LETTAU, J.H. GRAPH PAPER DESIGNS
LETTAU EDUCATIONAL ENTERPRISES INC., P
P.O. BOX 88, SANTA MARIA,
CALIFORNIA 93454 USA
+ (HOW GRAPH PAPER CAN BE USED TO CREATE DESIGNS: 31 SAMPLE DESIGNS, 64PP)
- LOCKWOOD, E.H. A BOOK OF CURVES
CUP, 1961. 11 BLMPUY *
+ (G360, ONE NEW CURVE DISCUSSED EVERY 2 PAGES)
- LUMB, D. AND PAPENDICK, A. MATHEMATICS 5 TO 9
MURRAY, 1978. 3 JBETP *
+ (MATHS GUIDE)

- MARSH, L.G. WORLD OF MATHEMATICS (LET'S DISCOVER MATHEMATICS, BOOKS 1-6) QK
- + BLACK, 1972 (MIS 3,1)
- HOLD, J. TOPICS FOR MATHEMATICS, (4 VOLS) KMQ *
- + CUP, 196 (MIS 1,1; TITLES ARE ROLLING, TESSELLATIONS, CIRCLES, SOLID MODELS)
- MOORE, W., WILLIAMS, H. NUFFIELD MATHEMATICS 2 4 JPT *
- + ET AL. LONGMANS, 1979
- MOORE, W., WILLIAMS, H. NUFFIELD MATHEMATICS 1 4 JPT *
- + ET AL. LONGMANS, 1979
- NUFFIELD/BRITISH COUNCIL MATHEMATICS : FROM PRIMARY TO SECONDARY 3 JLETOP
- + CHAMBERS/MURRAY/WILEY, 1978 (CONDENSED VERSION OF NUFFIELD GUIDES, COVERING THE 10-13 YEAR OLDS)
- NUFFIELD FOUNDATION CEDO MATHEMATICS: THE FIRST THREE YEARS. BJPT
- + CHAMBERS AND MURRAY, 1970. (CONDENSED VERSION OF NUFFIELD GUIDE)
- PALING, D. ET AL. MAKING MATHEMATICS; A SECONDARY COURSE. BOOKS 1-2-3-4, TOPIC BOOKS & WORKBOOKS. LMPQ
- + OUP, 1966-71. (MIS 1,3 NON - EXAMINATION SECONDARY PUPILS. TOPIC BOOKS INCLUDE MAKING MODELS, MOVEMENT AND PATTERN, FLOW DIAGRAMS TO COMPUTERS)
- PEARCY, J.F. AND LEVIS, K. EXPERIMENTS IN MATHEMATICS, STAGES 1,2,3. KMQ
- + LONGMANS, 1967

- SACKSON, S. A GAMUT OF GAMES. JKLMNPQVZ *
- + NELSON, 1974.
(IDEAL FOR A MATHS CLUB)
- SCHOOLS COUNCIL METRES, LITRES AND GRAMS
+ EVANS/METHUEN EDUCATIONAL, 1973 1 JPT
- SCHOOLS COUNCIL, CURRICULUM MATHEMATICS IN PRIMARY SCHOOLS
BULLETIN NO. 1. HMSO. EJMT *
- + (THE 'MODERN' APPROACH BY ONE OF ITS LEADING EXPONENTS AND POPULARISERS)
- SEAGROVE, B. AND WARD, J. MATHEMATICS WITH A PURPOSE; A GUIDE TO RUNNING A
+ ULP., 1968. P Q
- SEYMOUR, D. & GIDLEY, R. EUREKA
CREATIVE PUBLICATIONS INC., BOX 10328, Q
PALO ALTO, CALIFORNIA 94303,
USA, 1967
+ (NOTEBOOK OF ENRICHMENT PROBLEMS AND DRAWINGS, PP128)
- SEYMOUR, D. AND SCHADLER, R. CREATIVE CONSTRUCTIONS
CREATIVE PUBLICATIONS INC. BOX 10328, Q
PALO ALTO, CALIFORNIA 94303,
USA, 1974
+ (WORKBOOK OF GEOMETRICAL DESIGNS, PP62)
- STOVER STEREOGRAMS. PQMY
- + HOUGHTON-MIFFLIN.
(HOW TO MAKE STEREOSCOPIC PICTURES, WITH EXAMPLES AND PRECISE
INSTRUCTIONS, 30SPECTACLES PROVIDED)
- SZMIDT, T., ED. STATISTICAL TEACHING AIDS; MANUAL OF LABORATORY
EXPERIMENTS AND DEMONSTRATIONS IN STATISTICS.
+ INSTITUTE OF STATISTICIANS, 2ND EDN., 1977. CPU
(PP141)
- TAHIA D.G. PEGBOARD GAMES. MATHEMATICS TEACHING PAMPHLET
+ ATN, 1967. NO.13. EJKLMNPQTVZ

- TAYLOR, J. FOUNDATIONS OF MATHEMATICS IN INFANT SCHOOL.
ALLEN AND UNWIN, 1976 3 EJPT
+ (MIS 6,4, FIRST PART GIVES BACKGROUND TO PRESENT APPROACHES, SECOND
SUGGESTIONS FOR SPECIFIC TOPICS, PP16B)
- TAYLOR, J.M. "LOOKING AT ..."(SERIES) (SHAPES, SOLID SHAPES,
PATTERNS, LINES, SIZE, NUMBERS,
UNITS, WEIGHT) 2 KQ
+ BLACKWELL, 1969-73
(A SERIES WITH PICTURES AND VERY LARGE PRINT, ENCOURAGES INFANTS TO
HANDLE AND STUDY OBJECTS)
- THOMAS, A. & BANNISTER, M. NUMBER WORK WITH INFANTS.
BLACKWELL, 1974. 2 EJPT
+ (MIS 3,5, PRACTICAL SUGGESTIONS)
- THYER, D.F. & MAGGS, J.E. TEACHING MATHEMATICS TO YOUNG CHILDREN.
MOLT, RINEHART & WINSTON, 1971. 4 EJLQT
+ (SOURCE BOOK FOR TOPICS 5-9, EXCLUDING NUMBER, PP. 266)
- WALTER, M. MAKE A BIGGER PUDDLE; MAKE A SMALLER WORM
(GEOMETRY). JKLMPQ +
+ DEUTSCH, 1971.
(AN INVITATION TO PLAY WITH A MIRROR)
- WALTER, M. ANOTHER, ANOTHER, ANOTHER AND MORE. (GEOMETRY).
DEUTSCH, 1973. JKLMPQ +
+ (BRILLIANT - 'PLAY' WITH HINGED MIRROR)
- WENNINGER, M.J. POLYHEDRON MODELS. 6 BJLMPQVY +
CUP, 1971.
+ (G397,MIS1,4 CONSTRUCTION OF POLYHEDRA AND THEIR STELLATIONS, PP. 20B)
- WHITWORTH, W.A. CHOICE AND CHANCE. BPOUZ
+ HAFNER, 1959.
- WILLIAMS, E.M. AND SHUARD, PRIMARY MATHEMATICS TODAY.
H. 6 EJPT +
+ LONGMAN, 2ND EDN., 1979
(TEACHING METHOD AND CONTENT; EXCELLENT SOURCE BOOK)

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